

**Iowa Department of Natural Resources
Environmental Protection Commission**

ITEM

10

DECISION

TOPIC

Final Rule - Chapter 22, Special Requirements for Visibility Protection

The Commission will be asked to approve amendments to Chapter 22 "Controlling Pollution" of the 567 Iowa Administrative Code.

The purpose of the amendments is to adopt the federal regional haze regulations and to implement the Best Available Retrofit Technology portion of the regulations.

Previous federal regulations addressed visibility impairment attributable to specific sources. The 1999 federal Regional Haze Regulations address visibility impairment resulting from air pollution transported hundreds of miles and attributable to the cumulative emissions from widely distributed sources. Regional haze is visibility impairment caused by tiny particles that absorb and scatter sunlight, giving the sky a veil of white and brown haze.

In 2005, the department promulgated rules to assist in identifying stationary sources of air pollution potentially subject to the Best Available Retrofit Technology (BART) emission control requirements established by the federal Regional Haze Regulations. Stationary sources subject to the first rulemaking have provided the required information to the department. This rulemaking describes the process by which a stationary source is notified of its BART-eligibility status, defines the criteria that establishes a BART-eligible source's contribution to regional haze, and outlines the requirements for completing a BART analysis. This rulemaking also establishes a notification process for the initial and periodic reviews in the context of the federal Regional Haze Regulations.

The department has been meeting with a group of representatives from potential BART-eligible sources regarding the BART requirements and the timeline mandated by the federal regulations for implementation. The department will continue to meet with the group during the process of finalizing the BART determination and its requirements.

This rulemaking, the final BART determinations, and the associated modeling demonstrations will be submitted in a state implementation plan (SIP) to U.S. EPA in December 2007. After the initial SIP submittal, the department will continue to work with regional haze planning partners for the periodic review report due five years after the initial SIP and the comprehensive review due in 2018.

A public hearing was held on March 2, 2007. No comments were presented at the public hearing or during the public comment period. The public comment period closed on March 5, 2007.

If the Commission approves these rules, they will be published in the Iowa Administrative Bulletin and adopted into the Iowa Administrative Code on May 23, 2007. The rules will become effective on June 27, 2007.

An administrative rule fiscal impact statement is attached.

Wendy Rains
Environmental Specialist Senior
Program Development Section, Air Quality Bureau
April 9, 2007

ENVIRONMENTAL PROTECTION COMMISSION [567]

Adopted and Filed

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission hereby amends Chapter 22 “Controlling Pollution,” Iowa Administrative Code.

The purpose of the amendments is to adopt the federal regional haze regulations and to implement the Best Available Retrofit Technology portion of the regulations.

The Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on January 31, 2007, as ARC 5695B. A public hearing was held on March 2, 2007. No comments were presented at the hearing or during the public comment period. The public comment period closed on March 5, 2007.

Previous federal regulations addressed visibility impairment attributable to specific sources near Class I areas and in Class II areas. Class I areas include national parks and wilderness areas while Class II areas are areas where businesses and industries are located. The 1999 federal Regional Haze Regulations address visibility impairment resulting from air pollution transported hundreds of miles and attributable to the cumulative emissions from widely distributed sources. Regional haze is visibility impairment caused by tiny particles that absorb and scatter sunlight, giving the sky a veil of white and brown haze.

The federal Regional Haze Regulations are mandated by the federal Clean Air Act (Clean Air Act, Section 169(a), as codified in 40 CFR 51.301, 51.308). The Department must comply with the Regional Haze Regulations by December 2007.

These amendments are the second part of a two-part rule making. The Department previously amended Chapter 22 (ARC 4061B, Iowa Administrative Bulletin, March 16, 2005) to specify the criteria and process for an owner or operator of a major stationary source to provide

information necessary for the Department to identify sources of air pollution potentially subject to the Best Available Retrofit Technology (BART) emission control requirements established by the federal Regional Haze Regulations. Due to a lack of certainty regarding aspects of the unfinalized federal guidelines for the BART provisions of the Regional Haze Regulations, the Department proposed a two-part rule-making process.

This rule making establishes the process by which the Department will notify the owner or operator of a stationary source of air pollution whether the source is BART-eligible and whether the source needs to perform a BART analysis. This rule making defines the criteria that establish a BART source's contribution to regional haze. The Department will use these criteria as a basis for requiring a BART-eligible source to perform a BART analysis. The Department has met with a group of representatives from potential BART-eligible sources regarding the BART requirements and the time line required by the federal regulations for implementation.

This rule making also establishes a notification process for purposes of the federal Regional Haze Regulations. The initial regional haze implementation plan is due in December 2007. Every five years thereafter, a periodic review must be completed, and every ten years thereafter, a comprehensive revision is required. The Department will continue to work with stakeholders and regional planning partners as the Department works toward meeting regional haze goals.

Item 1 establishes definitions.

Item 2 adopts a modified list of stationary source category criteria for BART-eligible boilers. Previously, the criteria applied to one or more boilers that total more than 250 million Btu's per hour of combined heat input. The new BART criteria regulate boilers that individually total 250 million Btu's per hour heat input.

Item 3 specifies the Department's responsibility to notify source owners or operators of the requirements for the submission of a BART analysis if such an analysis is requested by the Department. Item 3 also outlines the additional analyses and control requirements for stationary sources that may be requested by the Department during state implementation plan development and the periodic reviews and updates required by the federal Regional Haze Regulations.

These amendments are intended to implement Iowa Code section 455B.133. These amendments become effective on June 27, 2007.

ITEM 1. Amend rule 567—22.9(455B) by renumbering subrules **22.9(1)** and **22.9(2)** as **22.9(2)** and **22.9(3)**, respectively, and adopting the following **new** subrule:

22.9(1) Definitions. Definitions included in this subrule apply to the provisions set forth in rule 567—22.9(455B).

“Best available retrofit technology (BART)” means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

“Deciview” means a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired. The deciview haze index is calculated based on an equation found in 40 CFR 51.301, as amended on July 1, 1999.

“Mandatory Class I area” means any Class I area listed in 40 CFR Part 81, Subpart D, as amended through October 5, 1989.

ITEM 2. Amend renumbered subrules 22.9(2) and 22.9(3) as follows:

22.9(2) Best available retrofit technology (BART) applicability. ~~Sources~~ A source shall comply with the provisions of subrule 22.9(2) (3) if ~~the sources fall~~ the source falls within numbers 1 through ~~26~~ 20 or 22 through 26 of the “stationary source categories” of air pollutants listed in rule 22.100(455B) or is a fossil-fuel fired boiler individually totaling more than 250 million Btu’s per hour heat input and ~~if they meet~~ meets the following criteria:

- a. Any emission unit for which startup began after August 7, 1962; and
- b. Construction of the emission unit commenced on or before August 7, 1977; and
- c. The sum of the potential to emit, as “potential to emit” is defined in 567—20.2(455B), from emission units identified above is equal to or greater than 250 tons per year or more of one of the following pollutants: nitrogen oxides, sulfur dioxide, particulate matter (PM₁₀), or volatile organic compounds.

22.9(3) Duty to self-identify. The owner or operator or designated representative of a facility meeting the conditions of subrule 22.9(4) (2) shall submit two copies of a completed BART Eligibility Certification Form #542–8125. The BART Eligibility Certification Form #542–8125 shall include all information necessary for the department to complete eligibility determinations. The information submitted shall include source identification, description of processes, potential emissions, emission unit and emission point characteristics, date construction commenced and date of startup, and other information required by the department. The completed form ~~shall be~~ was required to be submitted to the Air Quality Bureau,

Department of Natural Resources, 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322, by September 1, 2005.

ITEM 3. Adopt the following **new** subrules:

22.9(4) Notification. The department shall notify in writing the owner or operator or designated representative of a source of the department's determination that either:

a. A source meets the conditions listed in 22.9(2) (a source that meets these conditions is BART-eligible); or

b. For the purposes of the regional haze program, a source may cause or contribute to visibility impairment in any mandatory Class I area, as identified during either:

(1) Regional haze plan development required by 40 CFR 51.308(d) as amended on July 6, 2005; or

(2) A five-year periodic review on the progress toward the reasonable progress goals required by 40 CFR 51.308(g) as amended on July 6, 2005; or

(3) A ten-year comprehensive periodic revision of the implementation plan required by 40 CFR 51.308(f) as amended on July 6, 2005.

22.9(5) Analysis. The department may request in writing an analysis from the owner or operator or designated representative of a source that the department has determined may be causing or contributing to visibility impairment in a mandatory Class I area.

a. BART control analysis. For the purposes of BART, a source that is responsible for an impact of 1.0 deciview or more at a mandatory Class I area is considered to cause visibility impairment. A source that is responsible for an impact of 0.5 deciview or more at a mandatory Class I area is considered to contribute to visibility impairment. If a source meets either of these criteria, the owner or operator or designated representative shall prepare the BART analysis in

accordance with Section IV of Appendix Y of 40 CFR Part 51 as amended through July 5, 2005, and shall submit the BART analysis 180 days after receipt of written notification by the department that a BART analysis is required.

b. Regional haze analysis. The owner or operator or designated representative of a source subject to 22.9(4)“b” shall prepare and submit an analysis after receipt of written notification by the department that an analysis is required.

22.9(6) Control technology implementation. Following the department’s review of the analysis submitted pursuant to 22.9(5), an owner or operator of a source identified in 22.9(4) shall:

a. Submit all necessary permit applications to achieve the emissions requirements established following the completion of analysis performed in accordance with 22.9(5).

b. Install, operate, and maintain the control technology as required by permits issued by the department.

22.9(7) BART exemption. The owner or operator of a source subject to the BART emission control requirements may apply for an exemption from subrule 22.9(5) in accordance with 40 CFR 51.303 as amended on July 1, 1999.

Date

Richard A. Leopold, Director

Administrative Rule Fiscal Impact Statement

Date: 10/02/06

Agency: Natural Resources

IAC Citation: 567 IAC Chapter 22.9 (455B)

Rules Contact: Anne Preziosi

Summary of the Rule: This rule implements the Best Available Retrofit Technology (BART) provisions of the federal Regional Haze rule. The federal Regional Haze rule is intended to improve visibility nationally at specific national parks and wilderness areas. This rule requires the department to inform stationary sources that meet specific criteria whether they have been determined to be BART-eligible. Sources that are determined by the department to be causing or contributing to visibility impairment in a national park or wilderness area will be requested to provide a detailed BART analysis. The rule also specifies the requirements for additional analyses and controls that may be requested from stationary sources during the periodic reviews and state implementation plan updates specified in the federal regional haze program.

Fill in this box if the impact meets these criteria:

☒ No Fiscal Impact to the State.

☐ Fiscal Impact of less than \$100,000 annually or \$500,000 over 5 years.

☐ Fiscal Impact cannot be determined.

Brief Explanation:

There will be no change in state revenues or expenditures as a result of this rule.

Fill in the form below if the impact does not fit the criteria above:

☐ Fiscal Impact of \$100,000 annually or \$500,000 over 5 years.

* Fill in the rest of the Fiscal Impact Statement form.

Assumptions:

Describe how estimates were derived:

<i>Estimated Impact to the State by Fiscal Year</i>		
	<u>Year 1 (FY)</u>	<u>Year 2 (FY)</u>
Revenue by Each Source:		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
 TOTAL REVENUE	_____	_____
Expenditures:		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
 TOTAL EXPENDITURES	_____	_____
 NET IMPACT		
<p><u> X </u> This rule is required by State law or Federal mandate. <i>Please identify the state or federal law:</i></p> <p style="margin-left: 40px;">The BART Provisions of the Regional Haze Regulations are mandated by the Clean Air Act, section 169(a) and are codified in 40 CFR Part 51.308.</p>		
<p><u> </u> Funding has been provided for the rule change. <i>Please identify the amount provided and the funding source:</i></p>		
<p><u> X </u> Funding has not been provided for the rule. <i>Please explain how the agency will pay for the rule change:</i></p> <p>The agency will not need additional revenue to implement this rule.</p>		
<p><i>Fiscal impact to persons affected by the rule:</i></p> <p>Based on internal review, the department anticipates that approximately 27 stationary sources will be determined to be BART-eligible. If a BART analysis is determined to be necessary, the cost would likely range from approximately \$10,000 - \$15,000 per stationary source. The department is unable to determine the extent of the impact of future periodic reviews. The cost of an analysis would likely be similar to the BART analysis. The cost of installing controls at sources identified in the context of the regional haze regulations will depend on the outcome of the control technology analyses.</p>		
<p><i>Fiscal impact to Counties or other Local Governments (required by Iowa Code 25B.6):</i></p> <p>No impact.</p>		
<p>* If additional explanation is needed, please attach extra pages.</p> <p>Agency Representative preparing estimate: Wendy Rains Telephone Number: 515-281-6061</p>		